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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,794	10/30/2003	Cheng Chung Wang	10111395	8106

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QUINTERO LAW OFFICE, PC
2210 MAIN STREET, SUITE 200
SANTA MONICA, CA 90405

EXAMINER	
HEWITT, JAMES M	
ART UNIT	**PAPER NUMBER**
3679	

MAIL DATE	DELIVERY MODE
07/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/696,794	WANG, CHENG CHUNG	
	Examiner	Art Unit	
	James M. Hewitt	3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,10-12,14-18 and 20-27* is/are pending in the application.

4a) Of the above claim(s) *2-5* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,6,7,10-12,14-18 and 20-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/14/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/14/07 has been entered.

Election/Restrictions

Claims 2-5 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the telephone conversation with Nelson Quintero on 9/1/04.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6-7, 10-12, 14-18 and 20-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Price (US 5,606,756).

With respect to claim 1 and with reference to Figure 29, Price discloses an air mattress, comprising: an inflatable mattress pad (312), having an upper portion (314) and a lower portion (316); a separately inflatable back support (318), adjacent to the upper portion of the mattress pad; and an air pump assembly (26), built into the mattress pad, the air pump assembly arranged to inflate and power deflate the mattress pad (see col. 10, ll. 55-63, col. 11, ll. 16-19, col. 16, ll. 15-45, col. 18, line 21 - col. 19, line 5 and col. 19, ll. 13-22), wherein both the upper and lower portions are inflated when the mattress pad is inflated, and separately inflate the back support to raise the upper portion and vary an angle between the upper and lower portions of the mattress pad.

Price's air pump assembly is arranged to power deflate the mattress pad and back support via the solenoid valves of the diaphragm pump, which valves are power-actuated by an electrical controller.

With respect to claim 6, wherein the back support has a V-shaped cross section.

With respect to claim 7, the air pump assembly comprising a valve and a air outlet connected to the mattress pad, wherein the air pump assembly inflates the mattress pad when the valve is open.

With respect to claim 10, the air pump assembly comprising a valve and an air outlet connected to the back support, wherein the air pump assembly inflates the back support when the valve is open.

With respect to claim 11, wherein the air pump assembly comprises a pack having a first air outlet connected to the back support and a second air outlet connected to the mattress pad.

With respect to claim 12, wherein the air pump assembly comprises a pack, a fan and motor (104), and a motor switch mounted on the pack to activate the fan and motor.

With respect to claim 14 and with reference to Figure 29, Price discloses an air mattress comprising: an inflatable mattress pad (312) comprising an upper portion (314) and a lower portion (316); a separately inflatable back support (318) disposed adjacent to the upper portion of the inflatable mattress pad; and an air pump assembly (26) built into the inflatable mattress pad, the air pump assembly separately connected to the inflatable mattress pad and inflatable back support for inflation and powered deflation thereof (see col. 10, ll. 55-63, col. 11, ll. 16-19, col. 16, ll. 15-45, col. 18, line 21 - col. 19, line 5 and col. 19, ll. 13-22), wherein the upper portion of the inflatable mattress pad is raised such that the angle between the upper and lower portions of the inflatable mattress pad is varied when the inflatable back support is inflated by the air pump assembly.

Price's air pump assembly is able to power deflate the mattress pad and back support via the solenoid valves of the diaphragm pump, which valves are power-actuated by an electrical controller.

With respect to claim 15, wherein the air pump assembly further comprises a first air outlet communicating with the interior of the back support, and a second air outlet communicating with the interior of the inflatable mattress pad.

With respect to claim 16, wherein the air pump assembly further comprises a fan and motor (104).

With respect to claim 17, wherein the air pump assembly further comprises a first valve for controlling the passage of air through the first air outlet, and a second valve for controlling the passage of air through the second air outlet.

With respect to claim 18, wherein the air pump assembly further comprises a first switch for opening and closing the first valve, and a second switch for opening and closing the second valve.

With respect to claim 20, wherein the air pump assembly is connected to the inflatable back support through the interior of the inflatable mattress pad.

With respect to claims 21 and 22, wherein the air pump assembly is recessed into the inflatable mattress pad (see col. 18, ll. 60-62).

With respect to claim 23, wherein a portion of the inflatable back support physically adjoins a portion of the inflatable mattress pad. Refer to FIG. 29. The back support lies beneath the mattress pad and is connected thereto by tube (322).

With respect to claim 24, further comprising an air tube (322) communicating the air pump assembly and inflatable back support, wherein the air tube is situated within the inflatable mattress pad and connects to the inflatable back support through the adjoined portions of the inflatable mattress pad and the inflatable back support (see col. 18, ll. 64-65).

With respect to claim 25, wherein the air pump assembly arranged to power deflate the back support (see col. 10, ll. 55-63, col. 11, ll. 16-19, col. 16, ll. 15-45, col. 18, line 21 - col. 19, line 5 and col. 19, ll. 13-22).

Price's air pump assembly is able to power deflate the mattress pad and back support via the solenoid valves of the diaphragm pump, which valves are power-actuated by an electrical controller.

With respect to claim 26, wherein a portion of the inflatable back support physically adjoins a portion of the inflatable mattress pad. Refer to FIG. 29. The back support lies beneath the mattress pad and is connected thereto by tube (322).

With respect to claim 27, further comprising an air tube (322) communicating the air pump assembly and inflatable back support, wherein the air tube is situated within the inflatable mattress pad and connects to the inflatable back support through the adjoined portions of the inflatable mattress pad and the inflatable back support (see col. 18, ll. 64-65).

Response to Arguments

Applicant's arguments filed 5/14/07 have been fully considered but they are not persuasive.

Applicant argues "Price fails to teach or suggest an air pump assembly built into an inflatable mattress pad and arranged to inflate and power deflate the mattress pad, as recited in claim 1, or an air pump assembly built into an inflatable mattress pad, wherein the air pump assembly is separately connected to the inflatable mattress pad

and an inflatable back support for inflation and powered deflation thereof, as recited in claim 14. Applicant first notes that Price's diaphragm pump 26 does not have the feature of power deflation. To the contrary, it is evident throughout the reference that deflation of an air core is achieved by activating a solenoid to allow air to exhaust there from. Furthermore, examination of the pump construction shown in Figs. 10-17, 20 and 21 of Price reveals that it would be technically impossible for the diaphragm pump to exhaust air by motor assisted (power) deflation." Examiner disagrees. Price's solenoid valves are used as deflation means to exhaust air from the mattress pad and back support. These valves are electrically actuated by a hand-held controller, and thus are power deflated, as required by the claims.

Applicant also argues "Second, Applicant disagrees that Price teaches that diaphragm pump 26 is built into an inflatable mattress pad. In particular, 'mattress 312' in Fig. 29 is not described as being inflatable in the related description of the figure. Furthermore, in embodiments of Price's system, the diaphragm pump is disposed within non-inflatable foam segments surrounding one or more air cores. See, for example, Figs. 18 and 23. Given the lack of disclosure regarding the structure of mattress 312 shown in Fig. 29 (or Fig. 33), Applicant respectfully submits that the Examiner is reading claim features into the figure without adequate foundation in the actual reference itself." Examiner disagrees. With reference to col. 4, ll. 12-15, col. 18, line 21 – col. 19, line 22, the figures and the context of the disclosure, it is clear that mattress 312 is an air mattress. Price's entire disclosure is concerned with air mattresses. His title reads "Air Bedding System With Diaphragm Pump". The immediately following embodiment,

Figure 31, is a top view of an air mattress **312** which can be used with air wedges **318**. The wedges are to be disposed beneath the head section **314**. The air mattress **312** has a head section, foot section and gusset, all of which are identified by the same reference numerals used to identify the mattress **312**, head section, foot section and gusset in the embodiment of Figure 29.

Applicant asserts "Finally, Applicant submits that even if Fig. 29 were interpreted as teaching that the diaphragm pump is disposed inside an inflatable portion of the mattress (a view Applicant expressly rejects), such an interpretation is not supported by an enabling disclosure. For example, it is not at all evident how air leakage around the power cord 36 or the wire connecting to controller 22 could be prevented in such an arrangement, or how the pump is supported inside the structure." In response, as a patent was issued, it must be presumed that Price's device is fully functional and his disclosure enabling to one having ordinary skill in the art. Just as enablement in Applicant's disclosure is considered to be met by merely stating that the pump assembly is built into the mattress pad, the same should be afforded to Price. In both Applicant's and Price's disclosure, how the air pump assembly is built into the mattress pad is considered within the purview of the skilled artisan. Moreover, how air leakage around the power cord 36 or the wire connecting to controller 22 could be prevented in such an arrangement, or how the pump is supported inside the structure in Price is a spurious argument and does not address the 35 U.S.C. 102(b) rejection in view of Price.

Regarding new claims 23 and 26, Applicant argues "New claims 23 and 26 recite that a portion of the inflatable back support physically adjoins a portion of the inflatable

mattress pad. To the contrary, Price teaches that mattress 312 and air wedge 318 are separated by a solid wall 324 that is raised upwards and diagonally by the inflation of the air wedge. Col. 19, lines 6-10. Applicant therefore submits that claims 23 and 26 are allowable over the cited reference." Examiner disagrees. Price's mattress and air wedge are adjoined insofar as they lie next to each other. Note the following definition of "adjoin": 2 : to lie next to or in contact with (Merriam-Webster Online Dictionary).

Regarding new claims 24 and 27, Applicant argues "New claims 24 and 27 recite an air tube communicating the air pump assembly and inflatable back support, wherein the air tube is situated within the inflatable mattress pad and connects to the inflatable back support through the adjoined portions of the inflatable mattress pad and the inflatable back support. Insofar as Price does not teach or suggest adjoined portions as recited in the claims, it is evident that hose 322 cannot connect to wedge 318 there through. To the contrary, as shown in Fig. 29, hose 322 extends outside mattress 312 and around solid wall 324 to reach wedge 318. Furthermore, while Price teaches that hose 322 may be "primarily disposed within mattress 312" (col. 18, lines 64-65), it is evident that hose 322 must nevertheless extend at least partially out of mattress 312 in order to reach around solid wall 324 to wedge 318. Applicant therefore submits that claims 24 and 27 are allowable over the cited reference." Price's teaching that hose 322 may be primarily disposed within mattress 312 is sufficient to meet the limitation "wherein the air tube is situated within the inflatable mattress pad and connects to the inflatable back support through the adjoined portions of the inflatable mattress pad and the inflatable back support."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hewitt whose telephone number is 571-272-7084.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JMH
6/25/07

JAMES M. HEWITT
PRIMARY EXAMINER